ACKNOWLEDGMENTS

John F. Burton, F.R.E.S., has kept me on the entomological straight and narrow and I am grateful to him. Dr. D. R. Ragge has helpfully answered one or two questions, as did Hans Traber. Donald Glanville compiled the cross-index, and Miss Rosemary Smith rendered valuable secretarial service.

REFERENCES

- Boswall, Jeffery (in press). "A discography of Palearctic amphibian sound British Birds, special supplement, 63 pp.
- Boswall, Jeffery (1966). "New Palearctic bird sound recordings in 1964-65". British Birds, 59: 27-37.
- Boswall, Jeffery (in Press). "A discography of Palearctic amphibian sound recordings". British Journal of Herpetology.

Butterflies of New Providence Island, Bahamas

By B. K. WEST

(continued from p. 179)

HELICONIIDAE

20. Heliconius charitonius L. New record. My sojourn on the island was nearing completion when on February 16th, 1946, I saw and caught one of these graceful zebra striped Heliconiids in a woodland glade on a private estate to the West of Lake Cunningham. No more were noticed that day, but during subsequent visits to the spot about a dozen more were seen, though no more after mid-March. None was seen elsewhere. My specimens seem identical with those from Florida, having the yellow bands extremely narrow, thus belonging to subspecies tuckeri Comstock & Brown.

Range Colombia to Gulf Coast of U.S.A.

21. Dryas julia carteri N. D. Riley. Rather local, but I found several colonies in clearings alongside the Interfield Road; the butterflies were easy to capture as they visited flowers. Their behaviour here was in complete contrast to those I endeavoured to net in Trinidad in August 1965, where the local race usually defied capture by their fast and high flight and brief attendance at flowers. Range: Argentine to the Gulf Coast of U.S.A.

22. Agraulis vanillae insularis N. D. Riley. One of the commonest

butterflies, especially in open spaces with a profusion of flowers. Range: Argentine to U.S.A.

NYMPHALIDAE

- 23 Euptoieta hegesia hegesia Cram. Common in clearings, visiting flowers in company with the more numerous A. vanillae. Range: Argentine to Texas.
- 24 Phycioides frisia frisia Poey. Much less numerous than the two preceding species, and found in small colonies, in and near open spaces. Several colonies were found on Oakes Field, but the best was beside the road at the eastern extremity of the island. Range: Colombia to Texas and Florida.

25. Anartia jatrophe guatanamo Munroe. Common, especially in marshy localities, both inland and along the coast. Dry season specimens are darker above, and have a deeper orange colour beneath, especially on the hindwings.

Range: Argentine to Texas and Florida.

- 26 Vanessa cardui L. New record. One rather worn specimen was seen and captured on the North shore of Lake Killarney, 24.xi.1945. Range: Greater Antilles and Central America to Canada.
- 27. Marpesia peleus Sulz. Uncommon. Only three were seen, and these were captured. Two were caught flying beside the Interfield Road to the West of Lake Cunningham. 24.xi.1945 and 13.i.1946, and the third was found settled inside an outhouse in the same locality 15.xii.1945. In the B.M. Coll. are specimens caught by F. E. Taylor, Neville Chamberlain, G. Carter and J. L. Bonhote.

Range: Argentine to Central America and Cuba.

- 28a. Junonia evarete zonalis C. & R. Felder. Two flourishing colonies of this local insect were discovered, one on Oakes Field and the other beside the Golf Course. Some of my specimens have the anterior eye-spot of the upperside hindwing black and with no blue pupil, and one has the posterior eye-spot of the forewing also quite black.
- 28b. Junonia evarete Hubn. Not seen. There is one in the B.M. Coll. caught by Bonhote 17.x.1898, and several others labelled 'Bahamas'. All these have a very large anterior eye-spot on the upperside hindwing, with blue and reddish shading within the spot. Range of J. evarete: Argentine to Canada.
- 29. Metamorpha stelenes L. New record. Only three were seen, one of which was caught on Cable Beach, West of Nassau, 26.xii.1945. I can find no other record for the Bahama Islands.

Range: Argentine to Texas and Florida (casual).

30. Lucinia sida albomaculata Rindge. New record. Less than a dozen were seen at various times flying around trees and settling upon their leaves, often high up, along the Interfield Road. I have three specimens taken 23.vi.1945, 30.vi.1945 and 8.ix.1945. I can find no previous record for N.P.I., but this subspecies occurs on Rum Cay, Eleuthera and Long Island among the Out Islands.

Range: Cuba, Haiti and Bahamas.

31. Anaea echemus Doubl. Not seen. The B.M. Coll. contains two, caught by Bonhote 23.iii.1898 and 12.iv.1898. However, I several times received accurate descriptions of this leaf butterfly from airmen who had seen specimens in the neighbourhood of Windsor Field.

Range: Bahamas, Cuba and Cayman Islands to Central America.

RIODINIDAE

 Apodemia carteri Holland. Not seen. One recorded by D. Fraser, 24.i.1929 (Rindge). Range: Cuba and Bahamas only.

LYCAENIDAE

33. Strymon martialis H.-Sch. Common in bushy and wooded places, though far less so than S. collumela Fab. A frequent visitor to flowers of Bidens pilosa. Range: Cuba, Jamaica, Cayman Islands and Florida.

- 34. Strymon maesites H.-Sch. New record. This very small, brilliant purple hairstreak I associated with the cocoplum (*Chrysobalanus icaco* L.). They flew about the bushes and settled on the leaves, there to disappear due to their green undersides. A rather local insect; I have two $\delta \delta$ dated 4.vi.1945 and 16.vi.1945, and one Q caught 22.vi.1945. Range: St. Vincent to Cuba and Southern Florida.
- 35. Strymon angelia dowi Clench. Fairly common in wooded localities, flying around trees but also descending to feed at low growing flowers. Range: Cuba, Haiti and Florida.
- 36. Strymon columella cybira Hewitson. The commonest Lycaenid on the island, frequenting wooded areas. Range: Venezuela to U.S.A.
- 37. Leptotes cassius theonus Lucas. Common flying about a certain kind of tree in a manner reminiscent of C. argiolus L. in Britain, although in appearance it closely resembles a small, but tail-less S. telicanus Lang which has similar habits in Southern Europe and Africa. Range: Argentine, West Indies and Central America to Florida.
- 38a. Hemiargus ammon ammon Lucas. Some half dozen were seen in the neighbourhood of the Golf Links; the four I possess were caught 10.vi.1945, 2.ix.1945, 15.xi.1945 and 25.xi.1945. It is also recorded from Nassau (Comstock and Huntington); Ann. New York Acad. Sci., vol. 45).
- 38b. Hemiargus ammon thomasi Clench. Not seen. Recorded from a locality about four miles West of Nassau by members of the Van Voast American Museum of Natural History Expedition, 8.iv.1953 (Rindge; Amer. Mus. Novitates, no. 1715). There appears to be some confusion regarding this species.

Range of H. ammon: Cayman Islands, Cuba, Bahamas and Florida.

39. Hemiargus ceraunus ceraunus Fab. New record. This small blue was found in one locality only, a formerly cultivated field overgrown by a coarse leguminous plant some three or four feet high, in the South-east of the island. I suspected that this plant was the food plant of the larvae. I have six $\sigma \sigma$ and two $\varphi \varphi$ caught in October, November and December, 1945.

Range: Jamaica, Bahamas and Central America to Georgia.

40. Brephidium exilis isophthalma H.-S. Not seen. Recorded by Clench in Psyche, vol. 49.

Range: Cuba and Central America to Utah.

HESPERIIDAE

- 41. Phocides batabano batabanoides Holland. Three of this large blue and black skipper were seen, all in an extensive field several miles to the West of Nassau. Two of them were caught 14.xi.1945 and 17.xi.1945, and these quickly became damaged by their violent behaviour in the net and killing bottle. Klots mentions that this insect is associated with the Red Mangrove (*Rhizophora mangle*). Range: Argentine to Florida.
- 42. Polygonus leo savigny Latr. Occasionally observed visiting flowers, especially by the roadside to the South of Lake Cunningham. I have two specimens dated 12.xii.1945 and 24.i.1946, while in the B.M. Coll. are four caught 30.iii.1898, including a remarkable aberration without

spots on the forewings.

Range: Argentine to Florida.

43. Epargyreus zestos Geyer. Common, often seen feeding at flowers in Nassau gardens.

Range: Central America, West Indies and Southern Florida.

44. Urbanus proteus domingo Scudder. The commonest of the large Hesperiids, often seen in Nassau gardens feeding at Bougainvillea, while in the country the flowers of Stachytarpheta jamaicensis were an unfailing attraction. Range: Argentine to U.S.A.

45. Euphyriades brunnea brunnea H.-Sch. Quite common, especially at at Lantana blossom.

Range: Dominica, Cuba, Jamaica, Honduras and Southern Florida.

46. Hylephila phyleus Drury. Local, but found quite commonly in several grassy fields some miles to the West of Nassau, where the flowers of Stachytarpheta jamaicensis and Commelina elegans were an attraction to them.

Range: Argentine to Canada.

47a. Atalopedes mesogramma mesogramma Latr. Common in some grassy fields and along roadsides to the West of Nassau, attracted together with subspecies carteri, to many kinds of flowers, especially to those of Stachytarpheta jamaicensis and Commelina elegans. I have specimens dated 18.vi.1945 and 25.vi.1945; there is one specimen in the B.M. Coll.

Range: Puerto Rico, Haiti, Cuba and Costa Rica.

- 47b. Atalopedes mesogramma carteri Evans. This much smaller subspecies flew in similar localities, and usually with, A. m. mesogramma. In 1950, when submitting these insects to Brigadier Evans for identification, he suggested that the endemic subspecies carteri might be a long established resident on the island, whereas subspecies mesogramma was probably a later arrival continually reinforced by migrants from Haiti or Cuba, and he was interested to hear that the two subspecies flew together and that nothing approaching an intermediate form was ever seen. I have specimens taken 25.vi.1945 and 24.xi.1945.
- 48. Wallengrenia otho misera Lucas. Another common species of grassy tracts, often accompanying P. panoquinoides in marshy habitats, skipping from flower to flower only a few inches from the ground. Range: Argentine to Canada.
- 49. Panoquina panoquinoides Skinner. New record. A very common Hesperiid of marshy situations, spending its time at low growing flowers and flitting from one to another. It was particularly abundant on small open patches of ground margined with mangroves beside Lake Killarney. I have series dated 24.xii.1945 and 13.i.1946. Range: Peru to West Indies, California and Florida.
- 50. Calpodes ethlius Stoll. Not seen. In the B.M. Coll. is a d bred by G. Carter from a larva found on Canna; it is labelled Nassau, July 1901. Three more specimens were recorded from N.P.I. in December, 1951 (Dodge).

Range: Argentine to U.S.A.

51. Euphyes cornelius agra Evans. Another frequent visitor to Lantana blossom, but there are few previous records. I have six dated 27.vi.1945

15/IX/66

(4) and 3.viii.1945 (2), while the B.M. Coll. contains two, both males, the first labelled June 1897 (C. J. Maynard) and the other caught by Bonhote is dated 21.viii.1898.

Range: Cuba and Bahamas.

- 52. Burca braco castigata Rindge. Another common Hesperiid with few previous records, readily captured feeding from Lantana bushes. possess examples caught 27.vi.1945, 12.xi.1945 and 24.xii.1945. There is one specimen in the B.M. Coll., caught by Bonhote 16.xii.1901. Range: Honduras, Cuba and Bahamas.
- 53. Burca concolor atrata Rindge. New record. Uncommon; found in small colonies, mainly to the East of Nassau. These were in rocky localities amidst scrub vegetation, and the insects flitted about in the shade of bushes, sometimes being attracted to the flowers of Bidens pilosa where these were present. I have four specimens which were captured 25.vi.1945, 7.ii.1946 (2) and 8.ii.1946. Range: Cuba and Bahamas.

BIBLIOGRAPHY

Bates, M. 1935. The Butterflies of Cuba, Bull. Mus. Comp. Zool., Cambridge, Mass., vol. 78.

Clench, H. K. 1941. Notes on two Bahaman Lycaenidae. Torreia, no. 7.

Clench, H. K. 1941. A new race of Hemiargus (Lep. Lycaenidae) for the Bahamas. Mem. Soc. Cubana Hist. Nat., vol. 15.

Clench, H. K. 1943. The Lycaenidae of the Bahama Islands. Psyche, vol. 49.

Comstock, W. P. 1944. Insects of Porto Rico and the Virgin Islands. Scientific Survey of Porto Rico and the Virgin Islands, New York Acad. Sci., vol. 12. Comstock, W. P. and Huntington, E. I. 1943. Lycaenidae of the Antilles. Ann.

New York Acad. Sci., vol. 45.

Evans, W. H. 1951-1955. American Hesperiidae. Vols. 1-4.

Klots, A. B. 1951. A Field Guide to the Butterflies of North America, East of the Great Plains.

Munroe, E. G. 1950. The dina group of the genus Eurema in the West Indies. Jour. New York Ent. Soc., vol. 58.

1951. The genus Junonia in the West Indies. Munroe, E. G. Amer. Mus. Novitates, no. 1498.

Schuchert, C. 1935. Historical Geology of the Antillean-Caribbean Region.

Sharpe, E. M. 1900. On a collection of butterflies from the Bahamas. Proc. Zool. Soc. London.

The Wood White (Leptidea sinapis L.) in Wessex By H. SYMES

The wood white is now a rare species in Wessex, by which I mean the counties of Hampshire, Berkshire, Wiltshire, Somerset and Dorset. Α glance at the distriblution map at the end of Dr E. B. Ford's "Butterflies" will show that although there are well-known localities for sinapis to the east, north and west of the area, there is a vacuum in between them. This is very surprising in view of the fact that the area contains much woodland that appears to be an eminently suitable habitat for the wood white.

In Hampshire, according to the Victoria County History (1900), Vol. I, p. 130, the species became uncommon in the New Forest about 1883 (a year or two after the disappearance of Aporia crataegi L.), but a few lingered on in the south-east parts of the forest until 1900. It was still plentiful then in some woods near Basingstoke. G. A. B. Dewar, on p. 188 of "Wild Life in Hampshire Highlands" (1899) says that a few specimens were to be seen in the woodlands in the north of the county, no doubt including Doles